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# The United States of America



## The Director of the United States Patent and Trademark Office

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

J1046 U.S. PTO  
09/998991  
11/29/01



Therefore, this

## United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America for the term set forth below, subject to the payment of maintenance fees as provided by law.

If this application was filed prior to June 8, 1995, the term of this patent is the longer of seventeen years from the date of grant of this patent or twenty years from the earliest effective U.S. filing date of the application, subject to any statutory extension.

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Nicholas P. Eodice

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...  
Celia M. Puron



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**United States Patent**  
**Racz**

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**CATHETER CONNECTOR**Inventor: **N. Sandor Racz, Greenfield Center, NY  
(US)**Assignee: **Epimed International, Inc.,  
Gloversville, NY (US)**Notice: Under 35 U.S.C. 154(b), the term of this  
patent shall be extended for 0 days.Appl. No.: **09/134,801**Filed: **Aug. 14, 1998**Int. Cl.<sup>7</sup> ..... **A61M 25/16; F16B 39/24;  
F16B 21/00**U.S. Cl. .... **604/534; 604/905; 411/512;  
411/531; 411/161; 128/912**Field of Search ..... **604/30, 32-34,  
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399, 512, 160-162; 285/2, 89, 104, 105,  
109, 123.12, 123, 13, 123.14, 374, 386,  
399, 405-416****References Cited****U.S. PATENT DOCUMENTS**

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Compressible lock washers for use in catheter connectors. One such lock washer (60) includes a support ring (62) and tube engagement flanges (64) extending centrally therefrom, oblique to the ring and each extending from the same side thereof. The tube engagement flanges (64) define a tube receptacle (72) through which a catheter tube (58) may be inserted. Upon compression of the lock washer (60), the tube engagement flanges (64) are forced toward the ring (62), decreasing the diameter of the tube receptacle (72). Thus, during compression of the lock washer (60), the tube engagement flanges (64) engage the catheter tube (58) which runs through the tube receptacle (72), securing the catheter tube within the catheter connector (20) with which the lock washer is associated.

16 Claims, 4 Drawing Sheets

